

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

(DRAFT)

Conditional Major, Construction / Operating

Permit: F-07-023

Solvent Distillation, Inc.

Louisville, KY 40214

June 21, 2007

Maher Sharif, Smith Management Group, Preparer

Ralph E. Gosney, Reviewer

SOURCE ID: 21-157-09161

SOURCE A.I. #: 80714

ACTIVITY ID: APE20060001

SOURCE DESCRIPTION:

The source operates a portable solvent distillation unit. According to the operator, the unit is capable of operating statewide and with any type of solvent available for recovery through distillation. Potential volatile organic compounds (VOC) emissions are slightly less than major source threshold, but the source-wide potential to emit (PTE) for single and combined hazardous air pollutants (HAP) is greater than major source threshold. Actual emissions are anticipated to be lower than the source-wide PTE, therefore the source has requested a conditional major limitation on HAP emissions.

Whatever facility uses the portable solvent distillation unit shall include the emissions from the solvent distillation unit as part of the emissions from the entire source that uses the equipment. Each facility at each location that uses the portable solvent distillation unit shall follow their own operating permit, if required to have one, which may have its own operating and emission limitations, as well as testing, monitoring, recordkeeping, and reporting requirements, and source-wide emission and operating caps. The potential emissions from the portable solvent distillation unit will be the controlled emissions, which are required in this permit, F-07-023.

COMMENTS:

There are two significant emission units for the portable solvent distillation unit: a diesel generator; and a vacuum distillation unit.

Type of control and efficiency:

The emissions of VOC and HAP from the vacuum distillation unit will be controlled by an activated carbon filter for EP-01 with 95% control efficiency.

Emission factors:

The emission factors from the diesel generator were based on the combustion of diesel fuel in AP-42. The emission factors for the vacuum distillation unit were and will be determined by review of Material Data Safety Sheets at each facility and engineering mass balance.

Applicable regulation:

The emissions of hazardous material will be regulated by:

401 KAR 63:020 Potentially Hazardous Matter or Toxic Substances

401 KAR 52:030 Federally Enforceable Permits for Non-major Sources

EMISSION AND OPERATING CAPS DESCRIPTION:

Single HAP shall not exceed 9 tons per year (tpy). A year will be based on any consecutive twelve (12) month period. The emissions of combined HAP shall not exceed 22.5 tpy. The emission of VOC shall not exceed 90 tpy. Whatever facility uses the portable solvent distillation unit shall include the emissions from the solvent distillation unit as part of the emissions from the entire source that uses the equipment. Each facility at each location that uses the portable solvent distillation unit shall follow their own operating permit, if required to have one, which may have its own emission and operating caps.

PERIODIC MONITORING:

Monitoring, record keeping, and reporting, as specified in the conditional major permit, will ensure compliance with annual emission limits.

The permittee shall keep calendar month records of usage all VOC/HAP containing materials. At the end of each month, VOC/HAP emissions shall be calculated, in tons of VOC/HAP per twelve (12) consecutive month period, and recorded. This shall be a 12-month rolling total, representing the most recent year. Additionally, these records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee has requested that the notification of each intended operation to be 24 hours prior to the operation. The permittee believes that greater than a 24-hour notification will impose an undue burden on the source utilizing the solvent distillation equipment. Sources utilizing the solvent distillation equipment sometimes need a quick response.

OPERATIONAL FLEXIBILITY:

None

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.